ROUTING SCHEME FOR DIFFERENTIAL PAIRS IN FLIP CHIP SUBSTRATES

ABSTRACT OF THE DISCLOSURE

A flip chip substrate is provided, which includes a plurality of conductive layers, including a top layer and a bottom layer. A first plurality of contacts, including first and second contacts corresponding to a differential signal pair, are arranged on the top layer within a die bonding area. A second plurality of contacts, including third and fourth contacts corresponding to the differential signal pair, are arranged on the bottom layer. First and second traces are routed between the first and third contacts and between the second and fourth contacts, respectively, wherein the second trace is routed out of the die bonding area on a different layer than the first trace. The traces are routed in a manner that reduces the length difference between the traces.